

# Committee for Mathematics Achievement

A committee legislated in 2005 by the Kentucky General Assembly (KRS 158.842)

## Strategic Plan for Improving Mathematics Achievement in Kentucky

In March 2005, the Governor signed into law House Bill 93 which established the Committee for Mathematics Achievement (CMA) and required it to develop and ultimately oversee a multi-faceted strategic plan to improve student achievement in mathematics at all levels of schooling in Kentucky. CMA identified four critical areas of need that must be addressed in order to improve mathematics performance at all levels of schooling in Kentucky.

### Need 1: Assessment for Mathematical Achievement

Kentucky needs a system for P-20 mathematics which incorporates both formative and summative assessments that, 1) is appropriate for all students and fully aligned with state adopted standards; 2) balances conceptual understanding, procedural skill and fluency, and application of mathematics; 3) produces valid and reliable results that measure achievement based on a clear and consistent definition of proficiency; and 4) allows educators to teach to the depth and breadth of the standards.

#### Active Goals:

- To have a system of assessments fully aligned with current adopted mathematics standards.
- To incorporate a variety of assessments in our system and practice.
- To develop a shared and consistent definition of mathematics proficiency at all levels between all stakeholders.

### Need 2: Effective Mathematics Instruction - Educator Development, Recruitment, and Retention

Kentucky needs to develop and disseminate a shared understanding of effective mathematics instruction. Kentucky needs systemic professional learning to enhance the mathematical awareness and knowledge of P-20 teachers, adult educators, and postsecondary faculty. Kentucky needs to employ and retain an appropriate number of teachers with expertise in mathematics and mathematics teaching through aggressive recruitment programs and research informed retention strategies.

#### Active Goals:

- To develop a shared understanding of effective mathematics instruction between P-20 teachers, adult educators, and postsecondary faculty.
- To increase the availability and the use of effective professional learning opportunities for P-20 teachers of mathematics with the systematic capacity to provide these opportunities for all teachers.
- To increase the knowledge base for all shareholders on best practices in recruitment and retention.

### **Need 3: An Expanded System of Mathematics Intervention**

Kentucky needs to expand its current efforts to implement and support P-20 interventions by 1) increasing the number of trained interventionists in P-12 classrooms; 2) initiating training programs, support, and resource development for interventions in middle and secondary schools; 3) aligning professional development, training, and credentialing opportunities with the intervention needs of pre-service and in-service teachers; 4) developing a shared understanding of research-based, intervention practices in requirements of and support systems for all college students and adult learners.

#### Active Goals:

- To increase the Mathematics Achievement Fund to support training and employing a Mathematics Intervention Teacher (MIT) for each school in the state of Kentucky.
- To have effective teacher preparation and development that meet the needs of students requiring additional, tiered mathematics instruction.
- To expand the Kentucky Center for Mathematics support middle and secondary mathematics and to increase its capacity to identify high quality training tools, resources, and provide training and support appropriate for the development of content and pedagogy of teachers at all levels, P-Adult.

### **Need 4: Communication and Collaboration**

Kentucky needs enhanced communication and collaboration between CMA organizations, policy-makers, agency heads and other shareholders. Efforts from all shareholder organizations in regards to improving mathematics education and achievement should work in concert, and not competition with, each other. The appropriate groups and people should be involved in decision making and work groups.

#### Active Goals:

- To create centralized location hub sharing news, stories, and updates regarding statewide initiatives and work in the area of mathematics education.
- To enhance working relationships through a more complete understanding of the connections between shareholders in mathematics education.